

# YASHOVARDHAN MALHOTRA

[in linkedin.com/in/yashom1/](https://www.linkedin.com/in/yashom1/) | [+1 \(814\)-280-3059](tel:+18142803059) | [yasho1612@gmail.com](mailto:yasho1612@gmail.com) | [github.com/yasho13](https://github.com/yasho13)

## EDUCATION

**Pennsylvania State University (University Park), PA, USA** August 2024 - Present  
Master of Science (MS): Computer Science Engineering (CSE). CGPA: 3.70 /4.00

**SRM Institute of Science and Technology** May 2017-May 2021  
Bachelor of Technology (B. Tech.): Computer Science Engineering (CSE) CGPA: 3.60 /4.00

## PROFESSIONAL EXPERIENCE

**SDE Intern Machine Learning | Amazon - Prime Video** July 2024 - Sept 2024

- Analyzed and benchmarked KNN-based recommendation models using ML evaluation metrics (Precision@6/20, Recall, NDCG), driving data-driven personalization decisions across 8 global territories and multiple treatments for millions of Prime Video users.
- Engineered and automated a config-driven ML metrics suite on AWS SageMaker AI pipelines, consolidating scattered outputs in S3 and publishing standardized metrics to CloudWatch dashboards, enabling real-time comparison of treatment trends across metrics and territories.
- Streamlined end-to-end metric extraction, transformation, and publishing (Python, Parquet, S3, CloudWatch), eliminating manual aggregation and improving experimentation efficiency by 80%+.
- Collaborated with applied scientists and ML engineers to productionize the metrics suite, accelerating model experimentation velocity and ensuring consistent tracking of recommendation quality.

**Senior Software Developer | Softlink Information Systems** July 2024 - Sept 2024

- Developed and optimized an OGMA plugin, enhancing network visualizations which garnered positive feedback from over 75 users who reported improved workflow efficiency attributed directly to these changes.
- Reduced rendering time by 47% , and improving real-time user interaction for Extreme Networks.
- Boosted visualization speed by 30% and ensured seamless integration with Ogma's core API.
- Reduced debugging time by 40% through continuous support and issue resolution.

**Team Lead/Software Developer | TATA Consultancy Services** June 2021 - Sept 2023

- Spearheaded the end-to-end development of a mobile application for the Directorate General of Foreign Trade in India, enhancing accessibility for over 10,000 users seeking trade resources.
- Deployed mobile applications across Android and iOS platforms achieving 10,000 downloads in first week.
- Managed AWS services, leading the infrastructure for microservices, ensuring robust CI/CD practices that resulted in a 40% increase in system efficiency and stability, utilizing AWS tools like Lambda, EC2, and CloudWatch to streamline operations.
- Designed and integrated the systems of the (DGFT) with the National Single Window Scheme (NSWS), consolidating diverse licensing processes, which enhanced application processing times by 30%.
- Engineered high-performance REST APIs in Java, increasing API scalability by 50%, and enhanced system stability by 40% through AWS microservices management.
- Administered robust management of AWS repositories and CI/CD pipelines that resulted in a reduction of deployment errors by over 25%, establishing reliable workflows crucial for maintaining system integrity.
- Created secure authentication API that reduced banking fraud by 80% in the Foreign Trade sector, notably enhancing security and trust.

## PROJECTS

- Composed Image Retrieval using Contrastive Learning and Task-oriented CLIP-based Features** ([link](#)) -Implemented a state-of-the-art method, fine-tuning the model with PyTorch and TensorFlow, and evaluating the model's performance, leveraging deep learning and computer vision.
- Early Stage Prediction of Diabetes Mellitus Using Machine Learning Algorithms** ([link](#)) – Used AI methods such as SVM, Logistic Regression, and ANN, aimed at improving diagnostic accuracy and predicting the disease before its onset.

## TECHNICAL SKILLS

- Languages:** Java, C++, Python, JavaScript, TypeScript, Cypher Query Language, SQL
- Machine Learning & Data Science:** TensorFlow, PyTorch, Scikit-learn, Keras, Pandas, NumPy, Matplotlib, Jupyter, RStudio.
- Cloud & DevOps:** AWS (Lambda, EC2, S3, SNS, SQS, CloudWatch, API Gateway, EventBridge, ECS, EKS, Elastic Beanstalk IAM), Google Cloud Platform (GCP), Microsoft Azure, Terraform, CloudFormation, CI/CD (Jenkins, GitLab CI, CircleCI), Docker, Kubernetes.
- Web & Mobile Frameworks:** Spring Boot, Django, Flask, React, Angular, Node.js, Express, OGMA, HTML5, CSS3, Bootstrap.
- Development:** Microservices, REST APIs, Graph Databases, Git, Maven, Gradle, Hadoop, Apache Spark